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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,169	02/04/2004	Yutaka Matsuda	NAKAZ5.001DV2	5174
20995	7590	06/30/2004		EXAMINER
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			LEE, DIANE I	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/772,169	MATSUDA ET AL.	
	Examiner D. I. Lee	Art Unit 2876	<i>[Signature]</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 2/4/04 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 10/005,384.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/15/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

1. Claims 1-5 are presented for examination.

Priority

2. Acknowledgment is made that this application is a divisional of U.S. Application Serial No. 10/005,384 filed November 2, 2001.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Claims 1-3 are objected to because of the following informalities:

(a) Re claim 1, line 7: A transitional phrase, such as --comprising-- should be inserted after "connection box";

(b) Re claim 1, line 7: Since it is vague and indefinite as to what is "it" in the claim, the phrase "it is checked" should be changed to --determine-- ;

(c) Re claim 2, lines 1-2: The phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention, thus, the phrase "identifying means, such as marks or bar-codes" should be changed to -- identifying means having marks or bar-codes--; and

(d) Re claim 3, line 3: The word "etc." should be deleted from the claim.

Appropriate correction is required.

Claim Interpretation

5. Applicant is claiming a wire harness inspecting method by checking whether the combination of sub harnesses is in conformity with the vehicle specifications or not according to the presence/absence of a specific connector fitted into the electrical connection box. The inspecting steps are known to take place after the wire harness has been assembled, i.e., wherein after a wire harness has been assembled by a wire harness assembly method for assembling a wire harness by selectively combining a plurality of sub harness in accordance with vehicle specifications where every sub harness is provided with a specific connector to be fitted into an electrical connection box prepared for the purpose (e.g., the specific connector of each sub harness is fitted into a predetermined portion of the electrical connection box when assembling a wire harness by combining the plurality of sub harnesses according to the known vehicle specifications). Therefore, the examiner has interpreted the process that taken prior to the wire harness inspection as an applicant's implied admission to be known. Accordingly, a wire harness inspecting method as set forth in claim 1 is herein interpreted to mean that "**a wire harness inspecting method comprising a step of determining whether the combination of sub harnesses is in conformity with the vehicle specifications or not according to the presence/absence of a specific connector fitted into the electrical connection box**".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soni et al. [US 5,331,113].**

Soni teaches that it is known that assembling wire harness in a manufacture of automotive harnesses environment where sub harnesses (wires and cables in the assembled harness) are assembled for a specific automotive purpose, such as the assembled harness is to be connected or fitted into the specific electrical connection or component within the automobile. Soni teaches that in the manufacture of automotive harness, determining whether the combination of sub harnesses (wires and cables in the assembled harness) is in conformity with the vehicle specifications or not (i.e., verifying that the harness has been assembled correctly or not) according to the presence/absence of an electrical current or signal is conventionally tested through the assembly (see col. 1, lines 20+).

Soni does not explicitly state that the electrical component of the automobile, which the assembled harness is to be connected or fitted into is an electrical connection box.

The fact that applicant has not structurally specify the electrical connection box in the claim, the specific electrical component of the automobile which the assembled harness is connected/fitted to (i.e., the physical points of demarcation between two end of the assembled automotive harness) would be an obvious equivalent to the claimed electrical connection box. Thus, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the specific

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electrical component of the automobile which the assembled harness is connected/fitted to would be equivalent to the claimed electrical connection box for they provide equivalent function within the share boundary of the assembled harness.

9. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soni in view of Knueppell [DE 42 18 985 A]. The teaching of Soni have been discussed above.

Soni does not teach the steps of providing an identifying means on the surface of the sub harness and conducting the inspection by optically reading the identifying means of the specific connector.

Knueppell teaches an automatic identification of harness 8 assembled with sub harness (wires 1-7). Wherein each sub harness is labeled with a machine-readable marking (i.e., a bar code) so that each sub harness is optically identified by a hand-held reader 16.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate an automatic optical identification technique of harness, as taught by Knueppell, in the harness inspecting method of Soni in order to automatically identify the combination of the wires in the harness by a machine. Such modification would have provided Soni with an easier method with a greater accuracy in identifying the each wires of the harness.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soni in view of Rockwell [US 5,072,185]. The teaching of Soni have been discussed above.

Soni does not expressly teach the steps of identifying the presence/absence of the specific connector electrically.

Rockwell teaches the steps of electrically testing the wire harness by checking the continuity of the wires and verifying the harness have bee assembled correctly (see col. 1, lines 11+).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the continuity testing of the harness in order to electrically identify and notify the any error in assembly of the harness in order to provide more rapid, accurate and reliable testing of the harness.

11. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soni in view of Towata [JP 60-100,771 A].** The teaching of Soni have been discussed above.

Soni does not teach a color coding inspection technique, i.e., different colors are give to the specific connectors of the sub harness, and inspection is executed by identifying he color of the specific connector fitted into the electrical connection box.

Towata discloses a wire harness inspecting method using a color-coding technique by providing different color coating to each wires (see the abstract).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate a known color coding technique of the wire harness, as taught by Towata, in the inspecting method of Soni, in order to provide an alternative method of identifying the wires of the harness.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Castanedo et al. [US 6,341,726] discloses an article tray inspecting method in an assembled environment which checks whether the combination of components is in conformity with the assembled specification or not according to the presences/absence of specific components in the article tray; and

Kawaguchi [JP 04-142,504], Kanamaru [JP 11-121,135], Web [US 3,699,438], and Taniuchi et al. [US 5,623,199] teaches an inspecting method of a wire harness.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. I. Lee whose telephone number is (571) 272-2399. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D. I. Lee
Primary Examiner
Art Unit 2876

D. L.